

# RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE  
February 1999

BUDGET ACTIVITY

**6 - Management Support**

PE NUMBER AND TITLE

**0605873M Marine Corps Program Wide Support**

COST (In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	6188	12923	8198	8255	8194	8151	8811	9767	Continuing	Continuing
C0030 Marine Corps Studies and Analysis	3032	3174	4584	4876	5032	5181	5439	5556	Continuing	Continuing
C0033 Marine Corps Operational Testing & Evaluation Activity	2228	1990	2167	2129	2206	2208	2390	2444	Continuing	Continuing
C0073 Human Resources Management & Forecasting	1	0	0	0	0	0	0	0	0	1
C2330 Chemical Biological Consequence Management	927	7759	1447	1250	956	762	982	1767	Continuing	Continuing
Quantity of RDT&E Articles										

(U) Mission Description and Budget Item Justification: This program element (PE) provides the analytical foundation for the Marine Corps Studies System (MCSS), including mandated Mission Area Analyses (MAA) and Milestone I Analysis of Alternatives (AoA). The studies program is the front-end of the Marine Corps acquisition system supporting the Concepts Based Requirements System (CBRS) and the Combat Development Process (CDP). The PE also supports Milestone 0/Phase 0 activities, including market surveys, cost estimates and other activities required to baseline high priority emerging requirements, target programs include high priority requirements from the CDP, Marine Corps Warfighting Laboratory (MCWL), CMC/Defense Planning Guidance and other sources. Additionally, the PE supports the Marine Corps Operational Test and Evaluation (OT&E) Activities, and the Chemical Biological Consequence Management projects.

(U) Justification for Budget Activity: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.

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Budget Item Justification

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BUDGET ACTIVITY <b>6 - Management Support</b>				PE NUMBER AND TITLE <b>0605873M Marine Corps Program Wide Support</b>					PROJECT <b>C0030</b>	
COST <i>(In Thousands)</i>	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
C0030 Marine Corps Studies and Analysis	3032	3174	4584	4876	5032	5181	5439	5556	Continuing	Continuing
Quantity of RDT&E Articles										

**A. (U) Mission Description and Budget Item Justification:**

(U) **MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:** This project funds the general studies and analysis portion of the Marine Corps Studies System (MCSS) and provides the analytical foundation for the Marine Corps Studies System (MCSS). As such, the MCSS is the front end of the Marine Corps' acquisition system which supports the Concepts Based Requirements Process (CBRP) and the Combat Development Process (CDP). The project funds a variety of studies and analyses approved for execution in the annual Marine Corps Studies Master Plan (MCSMP) to include: mandated Mission Area Analyses (MAAs), Milestone I (Conceptual) Analysis of Alternatives (AoAs), technology assessments; force structure analysis; weapons systems analysis; concept development and analysis; cost benefit analysis; training assessments; feasibility analysis; scenario development; and other analyses in support of the Program Objective Memorandum (POM) initiatives. The Marine Corps restructured and prefocused its mission area analysis program in FY97 for implementation in FY98. This new MAA process is designed to provide quantitative and qualitative information to decision makers on which to base decisions effecting improvements in operational concepts, doctrine, force structure, education, training, and procurement. The MCSS also provides analytical support for decision makers related to the resolution of current problems identified by the operating forces. Commencing in FY 2000, this project will also fund all Milestone 0/Phase 0 activities.

**(U) FY 1998 Accomplishments:**

- (U) \$ 1,040 Implemented the new Marine Corps Mission Area Analysis involving the use of various models and simulations to evaluate concepts, doctrine, and current and projected force structures in a variety of scenarios to determine capabilities and to identify deficiencies. Initiated and completed three MAAs: the MAA for the Noncombatant Evaluation Operation (NEO) Scenario, MAA for the Major Regional Conflict Amphibious Assault Scenario, and the MAA for the Southwest Asia Halt Scenario.
- (U) \$ 425 Continued and completed the Common Aviation Command and Control System (CAC2S) Analysis of Alternatives
- (U) \$ 805 Continued 5 FY97 studies: Tactical Fuel Systems (1998-2010); Increased Simulation for Training; Updating USMC Multiservice Operational Evaluations (MOEs) for Sustainability; Quality of Life for USMC; and Processes and Methodologies for the Development, Alignment, Prioritization, and Review of Depot Maintenance Requirements. All of these studies were completed except for the Quality of Life study which is continued into FY99.

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0605873M Marine Corps Program Wide Support

PROJECT

C0030

- (U) \$ 762 Initiated four new studies: MV-22 Student Undergraduate Pipeline Training and Fleet Replacement Squadron; Revolution in Military Affairs (RMA) Workshop and Wargame IV; Implications of Co-Locating MV-22 Squadrons at MCAS Camp Pendleton; and the Impact to Warfighting Capability Through the MV-22 Transition. Two of these studies were completed this fiscal year: Implications of Co-Locating MV-22 Squadrons at Marine Corps Air Station (MCAS) Camp Pendleton; RMA Workshop and Wargame IV. Also provided general support (TAD, printing, supplies & material) in support of the studies and analyses conducted under the auspices of the MCSS.

(U)Total \$ 3,032

### (U) FY 1999 Planned Program:

- (U) \$ 1,091 Initiate and complete three new Mission Area Analyses: an MAA on a Small Scale Contingency for a Sea Lane of Communications (SLOC) Scenario; an MAA on Military Operations in Urban Terrain (MOUT); and an MAA on a Marine Expeditionary Force (MEF) in a Major Theater of War (MTW).
- (U) \$ 478 Fund the continuation of 3 ongoing FY 1998 study and analysis projects: Quality of Life for USMC; MV-22 Student Undergraduate Pipeline Training and Fleet Replacement Squadron; and the Impact to Warfighting Capability Through the MV-22 Transition.
- (U) \$ 223 Initiate an Analysis of Alternatives that is approved in the MCSMP.
- (U) \$ 1258 Execute 5 to 7 high priority study and analysis projects approved in the FY 1999 MCSMP. Provide general support (TAD, printing, supplies & material) in support of studies conducted under the auspices of the MCSS.
- (U) \$ 124 Portion of extramural program reserved for Small Business Innovation Research (SBIR) assessment in accordance with 15 USC 638.

(U)Total \$ 3,174

### (U) FY 2000 Planned Program:

- (U) \$ 1,135 Initiate and complete three new Mission Area Analyses. Specific MAAs to be addressed are normally identified during the MAA review during mid FY 1999.
- (U) 872 Continue and complete one FY 1999 AoA and initiate 2 new AoAs. Estimate one of the new AoAs will be completed this fiscal year.
- (U) \$ 996 Execute the high priority study and analysis projects approved in the FY 2000 MCSMP.
- (U) \$ 894 Continue an estimated 3 to 4 ongoing FY 1999 study and analysis projects.
- (U) \$ 687 Conduct high priority Milestone 0/Phase 0 activities for emerging requirements.

(U)Total \$ 4,584

### B. (U) Project Change Summary

	FY 1998	FY 1999	FY 2000
(U) Previous President's Budget	3400	3846	3952
(U) Adjustments from the PRESBUD	-368	-672	632

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<b>BUDGET ACTIVITY</b> <b>6 - Management Support</b>				<b>PE NUMBER AND TITLE</b> <b>0605873M Marine Corps Program Wide Support</b>				<b>PROJECT</b> <b>C0030</b>					
<b>B. (U) <u>Project Change Summary</u></b>				<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>							
(U) Current Budget Submit				3032	3174	4584							
<p>(U) Change Summary Explanation:</p> <p style="margin-left: 20px;">(U) Funding: FY98 decrease of \$264 thousand reflects offset to finance other USMC requirements and a decrease of \$104 reflects SBIR assessment. FY99 decrease is due to revised economic assumptions and general adjustments. FY00 increase of \$632 is due to increases to execute Milestone0/ study and analysis activities as adjusted by revised economic assumptions and general adjustments.</p> <p style="margin-left: 20px;">(U) Schedule: Not Applicable</p> <p style="margin-left: 20px;">(U) Technical: Not Applicable</p>													
<b>C. (U) <u>Other Program Funding Summary</u></b>				<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To</u>	<u>Total</u>
(APPN, BLI #, NOMEN)													
(U) Not applicable													
<p>(U) <b>Related RDT&amp;E:</b> PE 0605154N (Center for Naval Analyses (CNA)), Project C0031 (Marine Corps Operations Analysis Group)</p>													
<p><b>D. (U) <u>Schedule Profile:</u></b> Not Applicable</p>													
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BUDGET ACTIVITY <b>6 - Management Support</b>				PE NUMBER AND TITLE <b>0605873M Marine Corps Program Wide Support</b>					PROJECT <b>C0033</b>	
COST <i>(In Thousands)</i>	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
C0033 Marine Corps Operational Testing & Evaluation Activity	2228	1990	2167	2129	2206	2208	2390	2444	Continuing	Continuing
Quantity of RDT&E Articles										
<p><b>A. (U) <u>Mission Description and Budget Item Justification:</u></b> This program supports the Marine Corps Operational Test and Evaluation (OT&amp;E) Activity (MCOTEA) representatives for Marine Corps OT&amp;Es and OT&amp;Es performed by Fleet Marine Force Commanders and Technical Support Activities. This program also provides for OT&amp;E of systems prior to procurement by the Marine Corps to include test planning, operational testing, and Independent Evaluation Report (IER) preparation.</p> <p><b>(U) FY 1998 Accomplishments:</b></p> <ul style="list-style-type: none"> <li>• (U)\$ 763 MCOTEA: Provided for organizational salaries.</li> <li>• (U)\$ 505 MCOTEA: Provided for organizational support and utilities.</li> <li>• (U)\$ 263 Advanced Field Artillery Tactical Data System (AFATDS): Conducted initial operational assessment and test.</li> <li>• (U)\$ 54 Tactical Air Operations Center (TAOC): Conducted IOT&amp;E associated with multiple system (JTIDS) integration.</li> <li>• (U)\$ 43 Team Portable Collection System (TPCS): Developed detailed test plan and began first phase of IOT&amp;E.</li> <li>• (U)\$ 25 Advanced Assault Vehicle Reliability, Availability, and Maintainability Rebuild to Standard (AAV RAM/RS): Developed detail test plans and collection data base.</li> <li>• (U)\$ 179 Mobile Electronic Warfare Support System (MEWSS): Conducted MOT&amp;E.</li> <li>• (U)\$ 250 Medium Tactical Vehicle Replacement (MTVR): Completed initial operational assessment and test; published assessment evaluation report.</li> <li>• (U)\$ 36 Tactical Data Network (TDN): Completed IER. Efforts concluded FY97 IOT&amp;E.</li> <li>• (U)\$ 10 Designated Marksman Rifle (DMR): Conducted IOT&amp;E and published IER.</li> <li>• (U)\$ 2 Advanced Driver Thermal Viewer (ADTV): Conducted IOT&amp;E which began in late FY 97.</li> <li>• (U)\$ 22 Marine Load System/Family of Body Armor (MLS/FBA): Conducted initial operational assessments and tests.</li> <li>• (U)\$ 76 Tactical Electronic Reconnaissance Processing and Evaluation System Upgrade (TERPES Upgrade): Conducted IOT&amp;E that incorporated JTIDS upgrade.</li> </ul> <p><b>(U)Total \$ 2,228</b></p>										
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## 6 - Management Support

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0605873M Marine Corps Program Wide Support

PROJECT

C0033

### (U) FY 1999 Planned Program:

- (U) \$ 827 MCOTEA: Provides for organizational salaries.
- (U) \$ 375 MCOTEA: Provides for organizational support and utilities.
- (U) \$ 425 Advanced Field Artillery Tactical Data System (AFATDS): Conduct IOT&E and publish IER.
- (U) \$ 134 Mobile Electronic Warfare Support System (MEWSS): Conclude MOT&E and publish IER.
- (U) \$ 49 Technical Control and Analysis Center (TCAC PIP): Conduct IOT&E and publish IER.
- (U) \$ 40 Team Portable Collection System (TPCS): Conduct IOT&E and publish IER.
- (U) \$ 40 AN/PSC 5 Manpack VHF Satcom Terminal (AN/PSC5): Conduct FOT&E and publish IER.
- (U) \$ 100 Portion of extramural program reserved for Small Business Innovation Research (SBIR) assessment in accordance with 15 USC 638.

(U)Total \$ 1,990

### (U) FY 2000 Planned Program:

- (U) \$ 1047 MCOTEA: Provides for organizational salaries.
- (U) \$ 780 MCOTEA: Provides for organizational support and utilities.
- (U) \$ 280 Medium Tactical Vehicle Replacement (MTVR): Conduct Initial Operational Assessment/Test.
- (U) \$ 60 Light NBC Reconnaissance System (LNBCRS): Conduct and publish DTP for IOT&E.

(U)Total \$ 2,167

### B. (U) Project Change Summary

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
(U) Previous President's Budget	1920	2009	2286
(U) Adjustments to Previous President's Budget	+308	-19	-119
(U) Current Budget Submit	2228	1990	2167

### (U) Change Summary Explanation:

(U) Funding: FY98 increase of \$736 thousand represents the realignment of funding to cover increase costs and efforts associated with the operational testing of programs and decreases in the amount of \$428 thousand reflect a SBIR transfer, a minor affordability adjustment and funding realignment to other Marine Corps programs. FY99 decreases reflects revised economic assumptions and general adjustments. FY00 decrease reflects revised economic assumptions and general adjustments and realignment of funds to other programs within the Marine Corps.

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BUDGET ACTIVITY <b>6 - Management Support</b>					PE NUMBER AND TITLE <b>0605873M Marine Corps Program Wide Support</b>					PROJECT <b>C0033</b>																							
<p>(U) Schedule: N/A</p> <p>(U) Technical: N/A</p> <table><tr><td><b>C. (U) <u>Other Program Funding Summary</u></b></td><td><u>FY 1998</u></td><td><u>FY 1999</u></td><td><u>FY 2000</u></td><td><u>FY 2001</u></td><td><u>FY 2002</u></td><td><u>FY 2003</u></td><td><u>FY 2004</u></td><td><u>FY 2005</u></td><td>To</td><td>Total</td></tr><tr><td><b>(APPN, BLI #, NOMEN)</b></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td><u>Complete</u></td><td><u>Cost</u></td></tr></table> <p>(U) Not Applicable.</p> <p>(U) <b>Related RDT&amp;E</b> Not Applicable.</p> <p><b>D. (U) <u>Schedule Profile</u>:</b> Not Applicable.</p>												<b>C. (U) <u>Other Program Funding Summary</u></b>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	To	Total	<b>(APPN, BLI #, NOMEN)</b>									<u>Complete</u>	<u>Cost</u>
<b>C. (U) <u>Other Program Funding Summary</u></b>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	To	Total																							
<b>(APPN, BLI #, NOMEN)</b>									<u>Complete</u>	<u>Cost</u>																							
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# RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 EXHIBIT)

DATE **February 1999**

BUDGET ACTIVITY				PE NUMBER AND TITLE						PROJECT
<b>6 - Management Support</b>				<b>0605873M Marine Corps Program Wide Support</b>						<b>C2330</b>
COST (In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
C2330 Chemical Biological Consequence Management	927	7759	1447	1250	956	762	982	1767	Continuing	Continuing
Quantity of RDT&E Articles										

**A. (U) Mission Description and Budget Item Justification:** This project includes improvements in all areas of the Chemical Biological Incident Response Force inclusive to its commodity areas of reconnaissance, decontamination, emergency medical support, communications & general support and force protection.

**(U) FY 1998 Accomplishments:**

- (U) \$ 927 Began industry development and government testing for prototype protective equipment, Nuclear Biological Chemical(NBC) Hand-Held Portable Detectors, Electrostatic Decontamination and Electrochemical Activation Deconationation Solution. Reliability, Adaptability and Maintainability and Durability (RAM-D) testing.
- (U)Total \$ 927

**(U) FY 1999 Planned Program:**

- (U) \$ 625 Continue to develop Electrostatic Decontamination System that uses statically charged fog to provide chemical protection to personnel, buildings, terrain, and equipment.
  - (U) \$ 51 Begin development and test of Modified Protective Mask Drinking Tube.
  - (U) \$ 3405 Continue Development of Small Unit Biological Detector (SUBD).
  - (U) \$ 2919 Begin development and test of ChemBio Dosimeter.
  - (U) \$ 294 Complete development and test of NBC Hand-Held Portable Detector to provide a portable, contamination, radiation and chemical detector.
  - (U) \$ 288 Begin development of General Purpose Filters which are compatible with the standard M40 Canister to provide improved Toxic Industrial Chemicals (TIC) protection
  - (U) \$ 177 Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.
- (U)Total \$ 7759

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PE NUMBER AND TITLE  
**0605873M Marine Corps Program Wide Support**

**(U) FY 2000 Planned Program:**

- (U) \$ 50 Begin development of Phase Change Cooling garment to reduce heat stress during extended consequence management operations.
- (U) \$ 150 Begin development of Improved Level A Communications to responders wearing OSHA Level A Protection.
- (U) \$ 650 Continue development of Electrostatic Decontamination System.
- (U) \$ 50 Begin development of Sensitive Equipment Decontamination for a portable capability.
- (U) \$ 150 Begin development of a Casualty Tracking System to track and monitor the location, condition, and treatment of casualties at an incident site.
- (U) \$ 175 Develop an improved Chemical Biological Database by integrating current collection of COTS hazard prediction and information software.
- (U) \$ 193 Begin development of Multi-patient Medical Monitor to provide the capability to conduct mobile medical monitoring at multiple remote monitoring sites.
- (U) \$ 29 Complete development and test of General Purpose Filters.
- (U)Total \$ 1,447

**B. (U) Project Change Summary**

FY 1998

FY 1999

FY 2000

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BUDGET ACTIVITY

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PE NUMBER AND TITLE

0605873M Marine Corps Program Wide Support

PROJECT

C2330

### B. (U) Project Change Summary

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
(U) Previous President's Budget	1311	1277	1468
(U) Adjustments to Previous President's Budget	-384	6482	-21
(U) Current Budget Submit	972	7759	1447

### (U) Change Summary Explanation:

(U) Funding: FY 98 decrease reflects SBIR and other minor affordability adjustments.

FY 99 reflects plus-up for Small Unit Biological Detector (SUBD) (\$3.5M) and ChemBio Dosimeter (\$3M) and decreases due to revised economic assumptions and general adjustments (\$18k).

FY 00 decrease reflects revised economic assumptions and general adjustments.

(U) Schedule: Not Applicable

(U) Technical: Not Applicable

### C. (U) Other Program Funding Summary (APPN, BLI #, NOMEN)

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	To <u>Compl</u>	Total <u>Cost</u>
(U) PMC Line (BLI # 652200) Field Med Equip	10000	2179	2445	1941	1363	972	4271	5419	Cont.	Cont.

### (U) Related RDT&E:

PE 0605154N (Center for Naval Analyses (CNA))

### D. (U) Schedule Profile: Not Applicable

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